Requirements

To use NetworkX you need Python version 2.3 or later http://www.python.org/
See below for tips on installing Python.

Installing Pre-built NetworkX packages

The following pre-built NetworkX packages are available:

Windows

Download and run the latest version of the Windows installer (.exe extension).

OSX 10.5

Download and install the latest mpkg.

Linux

Debian packages are available at http://packages.debian.org/unstable/graphics/python-networkx

Python Eggs for All Platforms

Python eggs are prepackaged distributions that can be automatically installed using EasyInstall http://peak.telecommunity.com/DevCenter/EasyInstall
Run

```
easy_install networkx
```

and an attempt will be made to find and install an appropriate version that matches your operating system and Python version.

Installing from Source

You can install from source by downloading a source archive file (tar.gz or zip) or by checking out the files from the Subversion repository. NetworkX is a pure Python package (you don't need a compiler to build or install it).

Source Archive File

- *Download the source (tar.gz or zip file).*
- *Unpack and change directory to networkx-x.xx where x.xx is the version number*
- *Run "python setup.py install" to build and install*

- *(optional) cd networkx/tests and run "python setup_egg.py test" to execute the tests*

SVN Repository

Make sure you have Subversion installed (SVN)

- *Check out the networkx trunk: svn co https://networkx.lanl.gov/svn/networkx/trunk networkx*
- *Run "python setup.py install" to build and install*
- *(optional) run "python setup_egg.py test" to execute the tests*

Optional packages

NetworkX will work without the following optional packages. But to enable all functionality you will need the following:

- *To enable drawing networks with matplotlib you need*
  - *numpy http://numpy.scipy.org/*
  - *Matplotlib http://matplotlib.sourceforge.net/*
- *To enable graphviz layout and drawing features you need*
  - *pygraphviz http://networkx.lanl.gov/pygraphviz/*
  - *Graphviz http://graphviz.org/*

Installing Optional Packages

For Windows and OSX (non-fink, non-MacPorts) the easiest way to get Matplotlib/Numpy/Scipy installed is to follow the directions for installing pre-built Scipy binary packages at http://scipy.org/Download

For Linux systems try installing binary packages through your package management system.

Matplotlib

NetworkX uses Matplotlib for drawing graphs. For installation see the instructions at

- *http://matplotlib.sourceforge.net/installing.html*

Matplotlib uses numpy for numerical array computing (see above comment on how to install Matplotlib/Numpy/Scipy all together).

Additional useful packages

These are extra packages you may consider to use with NetworkX

- *IPython, interactive Python shell,* http://ipython.scipy.org/
- *SciPy, scientific computing package,* http://scipy.org/
- *sAsync, persistent storage with SQL,* http://foss.eepatents.com/sAsync
- *PyYAML, structured output format,* http://pyyaml.org/

Installing Python

If you don't have Python installed on your system:

Windows

The easiest way to get Python and most optional packages is to install the Enthought Python distribution: http://code.enthought.com/enthon/

Other options are

- *Download from the official Python site at* http://www.python.org/download/
- *ActiveState also distributes a binary version* http://activestate.com/Products/ActivePython/?mp=

OSX

OSX 10.5 ships with Python version 2.5. If you have an older version we encourage you to download a newer release. Pre-built Python packages are available from

- *Pythonmac* http://www.pythonmac.org/packages/

Other options are:

- *ActiveState* http://activestate.com/Products/ActivePython/?mp=1
- *Download from the official Python site at* http://www.python.org/download/

If you are using Fink or MacPorts, Python is available through both of those package systems.